

Sub 91
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and which have capacity for MHC class I (MHC-I) and MHC class II (MHC-II) antigen presentation,

said MD-APCs having been produced by differentiating blood monocytes in vitro, in the presence of ligands enhancing the capacity of said MD-APCs for MHC-I antigen presentation relative to standard macrophages.

Sub 92
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55. (twice amended) Monocyte-derived antigen-presenting cells (MD-APCs) which present the following properties:

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(a) the presence on the MD-APC cell surface of surface antigens CD80 and CD86;
(b) the presence on the MD-APC cell surface of surface antigen CD14, and
(c) a phagocytic capacity,

said MD-APCs having been produced by differentiating blood monocytes in vitro, in the presence of ligands enhancing the capacity of said MD-APCs for MHC-I antigen presentation relative to standard macrophages.

REMARKS

At the outset, applicants and their attorneys wish to thank the Examiner for the courtesy of the recent

interview. The Examiner's careful attention to the application on that occasion is greatly appreciated.

By the present amendment, the remaining independent claims 44 and 55 are amended herewith in the manner presented and discussed at the recent interview. It is believed that the present amendment, if entered, would resolve the last remaining issues set forth in the outstanding Official Action.

Turning now to the Official Action, at item 5 thereof, various of the previous claims were rejected under the first paragraph of 35 USC §112, as allegedly being based on a non-enabling disclosure.

The claims that were subject to that rejection are canceled herewith, without prejudice. Thus, while applicants do not acquiesce in the propriety of that rejection, for the sake of expediting prosecution of the present application to allowance, those claims are canceled without prejudice to their possible presentation in a divisional application.

At item 7 of the Official Action, the same group of claims which had been rejected at item 6 for non-enablement, were further rejected as allegedly being indefinite. Needless to point out, the cancellation of the claims that

were subject to that rejection obviates the underlying rejection on the additional basis as well.

At item 10 of the Official Action, previous claims 44-61 were rejected under the first paragraph of 35 USC §112, as allegedly being based on an insufficient written description. That rejection was based on the previous amendment to claims 44 and 55 to recite MD-APCs "which are not tissues macrophages." By the present amendment, that language is deleted from claims 44 and 55, in favor of language that is more clearly supported by the original disclosure, and which further aids in distinguishing the claimed invention from the applied prior art.

Thus, the present amendment, in addition to markedly reducing the number of claims pending in the application after final rejection, would also resolve all of the §112 issues in the outstanding Official Action. Consequently, these factors militate strongly in favor of entry of the present amendment after final rejection.

The only issue remaining in the outstanding Official Action was the rejection of previous claims 44-66, 75, 76, 80 and 81 as allegedly being anticipated by, or, alternatively, obvious based on UNANUE (reference U1 of Form PTO-892, of record). That rejection is respectfully traversed, for the following reasons.

The present amendment, by its recitation of MD-APCs that are produced by differentiating blood monocytes in vitro, in the presence of ligands enhancing the capacity of said MD-APCs for MHC-I antigen presentation relative to standard macrophages, plainly distinguishes claims 44 and 55 from the UNANUE publication which relates merely to tissue macrophages that are neither isolated nor cultured.

At the interview, discussion was also had as to how the claimed MD-APCs are distinct from standard macrophages produced by apheresis and culturing. Present claims 44 and 55 specify that the claimed MD-APCs are produced by differentiating blood monocytes in vitro, in the presence of ligands enhancing the capacity of these MD-APCs for MHC-I antigen presentation, relative to standard macrophages, consistent with the teaching of the present specification.

Note that the recitation "relative to standard macrophages" that appears in amended claims 44 and 55 has been approved in other granted patents for this assignee. See U.S. Patent Nos. 6,001,351 and 5,662,899.

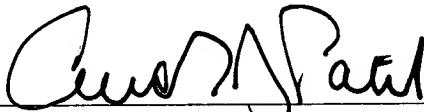
Consequently, it is believed to be apparent that the present amendment resolves all of the issues raised in the outstanding Official Action, and places the present application in condition for allowance, with claims 44-47, 49-51, 53-55, 58 and 61, as amended. Entry of the amendment

and allowance and passage to issue on that basis are accordingly respectfully requested.

Attached hereto is a marked-up version of the changes made to the claims. The attached page is captioned "Version With Markings To Show Changes Made."

Respectfully submitted,

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"VERSION WITH MARKINGS TO SHOW CHANGES MADE"

44. (twice amended) Monocyte-derived antigen-presenting cells (MD-APCs) [which are not tissue macrophages and] which have phagocytic capacity and which have capacity for MHC class I (MHC-I) and MHC class II (MHC-II) antigen presentation,

said MD-APCs having been produced by differentiating blood monocytes in vitro, in the presence of ligands enhancing the capacity of said MD-APCs for MHC-I antigen presentation relative to standard macrophages.

55. (twice amended) Monocyte-derived antigen-presenting cells (MD-APCs) [which are not tissue macrophages and] which present the following properties:

- (a) the presence on the MD-APC cell surface of surface antigens CD80 and CD86;
- (b) the presence on the MD-APC cell surface of surface antigen CD14, and
- (c) a phagocytic capacity,

said MD-APCs having been produced by differentiating blood monocytes in vitro, in the presence of ligands enhancing the capacity of said MD-APCs for MHC-I antigen presentation relative to standard macrophages.